OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/717,641

DATE: 12/06/2000 TIME: 15:13:14

Input Set : A:\P0645P4D2C3.txt

Output Set: N:\CRF3\12062000\I717641.raw

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ENTERED
                      SEQUENCE LISTING
W--> 3 SEQUENCE LISTING
      5 (1) GENERAL INFORMATION:
             (i) APPLICANT: Garrard, Lisa J.
      8
                             Henner, Dennis J.
      q
                             Bass, Steven
     1.0
                             Greene, Ronald
                            Lowman, Henry B.
     12
                            Wells, James A.
     1.3
                            Matthews, David J.
     15
            (ii) TITLE OF INVENTION: ENRICHMENT METHOD FOR VARIANT PROTEINS WITH
     16
                                     ALTERED BINDING PROPERTIES
           (iii) NUMBER OF SEQUENCES: 43
     20
            (iv) CORRESPONDENCE ADDRESS:
     21
                  (A) ADDRESSEE: Genentech, Inc.
     22
                  (B) STREET: 1 DNA Way
                  (C) CITY: South San Francisco
     23
                  (D) STATE: California
     24
                  (E) COUNTRY: USA
     26
                  (F) ZIP: 94080
     28
             (V) COMPUTER READABLE FORM:
                  (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
     29
     30
                  (B) COMPUTER: IBM PC compatible
     31
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
                  (D) SOFTWARE: WinPatin (Genentech)
     34
           (vi) CURRENT APPLICATION DATA:
C--> 35
                  (A) APPLICATION NUMBER: US/09/717,641
C--> 36
                  (B) FILING DATE: 21-Nov-2000
    37
                  (C) CLASSIFICATION:
    67
          (vii) PRIOR APPLICATION DATA:
                  (A) APPLICATION NUMBER: 08/922345
    41
                  (B) FILING DATE: 03-SEP-1997
                  (A) APPLICATION NUMBER: 08/463587
    44
    45
                 (B) FILING DATE: 05-JUN-1995
    48
                 (A) APPLICATION NUMBER: 08/050058
                 (B) FILING DATE: 30-APR-1993
                 (A) APPLICATION NUMBER: PCT/US91/09133
    53
                 (B) FILING DATE: 03-DEC-1991
    56
                 (A) APPLICATION NUMBER: 07/7436.14
    57
                 (B) FILING DATE: 09-AUG-1991
    60
                 (A) APPLICATION NUMBER: 07/715300
```

(B) FILING DATE: 14-JUN-1991

(B) FILING DATE: 10-APR-1991

(B) FILING DATE: 03-DEC-1990

(viii) ATTORNEY/AGENT INFORMATION:

(A) APPLICATION NUMBER: 07/683400

(A) APPLICATION NUMBER: 07/621667

64

65

68

69

RAW SEQUENCE LISTING DATE: 12/06/2000 PATENT APPLICATION: US/09/717,641 TIME: 15:13:14 Input Set : A:\P0645P4D2C3.txt Output Set: N:\CRF3\12062000\1717641.raw (A) NAME: Schwartz, Timothy R. 73 (B) REGISTRATION NUMBER: 32171 74 (C) REFERENCE/DOCKET NUMBER: P0645P4D2C3 76 (ix) TELECOMMUNICATION INFORMATION: 77 (A) TELEPHONE: 650/225-7467 (B) TELEFAX: 650/952-9881 (2) INFORMATION FOR SEQ ID NO: 1: 18 (i) SEQUENCE CHARACTERISTICS: 82 (A) LENGTH: 36 base pairs (B) TYPE: Nucleic Acid 83 84 (C) STRANDEDNESS: Single 85 (D) TOPOLOGY: Linear 87 (xi) SEQUENCE DESCRIPTION: SEQ LD NO: 1: GGCAGCIGIG GCTTCTAGAG TGGCGGCGGC TCTGGT 36 90 92 (2) INFORMATION FOR SEQ ID NO: 2: (i) SEQUENCE C ARACTERISTICS: 94 95 (A) LENGTH: 36 base pairs 96 (B) TYPE: Nucleic Acid 97 (C) STRANDEDNESS: Single 98 (D) TOPOLOGY: Linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2: 100 AGCTGTGGCT TCGGGCCCTT AGCATTTAAT GCGGTA 36 103 105 (2) INFORMATION FOR SEQ ID NO: 3: 107 (i) SEQUENCE CHARACTERISTICS: 108 (A) LENGTH: 33 base pairs 109 (B) TYPE: Nucleic Acid (C) STRANDEDNESS: Single 1.1.0 11.1 (D) TOPOLOGY: Linear 113 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3: 116 TTCACAAACG AAGGGCCCCT AATTAAAGCC AGA 33 118 (2) INFORMATION FOR SEQ TD NO: 4: 120 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 30 base pairs 121 122 (B) TYPE: Nucleic Acid 123 (C) STRANDEDNESS: Single 124 (D) TOPOLOGY: Linear 126 (X1) SEQUENCE DESCRIPTION: SEQ ID NO: 4: CAATAATAAC GGGCTAGCCA AAAGAACTGG 30 129 131 (2) INFORMATION FOR SEQ ID NO: 5: (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 24 base pairs 135 (B) TYPE: Nucleic Acid 136 (C) STRANDEDNESS: Single 1.37 (D) TOPOLOGY: Linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

CACGACAGAA TICCCGACTG GAAA 24 144 (2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 23 base pairs

142

1.46

147

RAW SEQUENCE LISTING DATE: 12/06/2000 PATENT APPLICATION: US/09/717,641 TIME: 15:13:14 Input Set : A:\P0645P4D2C3.txt Output Set: N:\CRF3\12062000\1717641.raw (B) TYPE: Nucleic Acid 148 149 (C) STRANDEDNESS: Single 150 (D) TOPOLOGY: Linear 152 (Xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 6: 155 CTGTTTCTAG ACTGAAATTG FTA 23 157 (2) INFORMATION FOR SEQ ID NO: 7:

160 (A) LENGTH: 21 base pairs 161 (B) TYPE: Nucleic Acid 162 (C) STRANDEDNESS: Single 163 (D) TOPOLOGY: Linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7: 165 ACATTCCTGG GTACCGTGCA G 21 1.70 (2) INFORMATION FOR SEQ TD NO: 8:

(i) SEQUENCE CHARACTERISTICS:

159

172 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 63 base pairs 173 1.74 (B) TYPE: Nucleic Acid 175 (C) STRANDEDNESS: Single 1.76 (D) TOPOLOGY: Linear

178 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8: 181 GCTTCAGGAA GGACATGGAC NNSGTCNNSA CANNSCTGNN SATCGTGCAG 50 183 TGCCGCTCTG TGG 63

185 (2) INFORMATION FOR SEQ ID NO: 9: 187 (i) SEQUENCE CHARACTERISTICS: 188 (A) LENGTH: 24 base pairs 189 (B) TYPE: Nucleic Acid (C) STRANDEDNESS: Single 190 191 (D) TOPOLOGY: Linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9: 193

AAGGTCTCCA CATACCTGAG GATC 24 198 (2) INFORMATION FOR SEQ ID NO: 10: 200 (i) SEQUENCE CHARACTERISTICS: 201 (A) LENGTH: 33 base pairs (B) TYPE: Nucleic Acid 202 203 (C) STRANDEDNESS: Single 204 (D) TOPOLOGY: Linear

206 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10: 209 ATGGACAAGC TGTCGACATA CCTGCGCATC GTG 33 211 (2) INFORMATION FOR SEQ ID NO: 11: 213

(i) SEQUENCE CHARACTERISTICS: 2.14 (A) LENGTH: 36 base pairs 215 (B) TYPE: Nucleic Acid 216 (C) STRANDEDNESS: Single 217 (D) TOPOLOGY: Linear

(xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 11: 219 GGCAGCTGTG GATTCTAC \G TGGCGGTGGC TCTGGT 36 222

224 (2) INFORMATION FOR SEQ ID NO: 12: 226 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 12 amino acids RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/717,641

Input Set: A:\P0645P4D2C3.txt
Output Set: N:\CRF3\12062000\1717641.raw

228
(B) TYPE: Amino Acid
(D) TOPOLOGY: Linear
(Xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 12:
233
Gly Ser Cys Gly Phe Glu Ser Gly Gly Gly Ser Gly

234 1 5 10
236 (2) INFORMATION FOR SEQ 1D NO: 13:
238 (i) SEQUENCE CHARACTERISTICS:
239 (A) LENGIH: 27 base pairs
240 (B) TYPE: Nucleic Acid
241 (C) STRANDEDNESS: Single
242 (D) TOPOLOGY: Linear
244 (Xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 13:

(Xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 13: CGGACTGGGC AGATAFICAA GCAGACC 27

249 (2) INFORMATION FOR SEQ ID NO: 14: 251 (i) SEQUENCE CHARACTERISTICS: 252 . (A) LENGTH: 38 base pairs 253 (B) TYPE: Nucleic Acid 254 (C) STRANDEDNESS: Single

255 (D) TOPOLOGY: Linear 257 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 260 CTCAAGAACT ACGGGTTACC CTGACTGCTT CAGGAAGG 38

262 (2) INFORMATION FOR SEQ ID NO: 15: 264 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 30 base pairs 266 (B) TYPE: Nucleic Acid 267 (C) STRANDEDNESS: Single 268 (D) TOPOLOGY: Linear

270 (xi) SEQUENCE DESCRIPTION: SEQ TD NO: 15:

273 CGCATCGIGC AGTGCAGAIC TGTGGAGGGC 30
275 (2) INFORMATION FOR SEQ ID NO: 16:
277 (i) SEQUENCE CHARACTERISTICS:
278 (A) LENGTH: 66 base pairs

279

280

281

(A) LENGTH: 66 base pairs(B) TYPE: Nucleic Acid(C) STRANDEDNESS: Single(D) TOPOLOGY: Linear

283 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16: 286 GTFACTCTAC TGCTTTCAGG AAGGACATGG ACNNSGTCNN SACANNSCTG 50 NNSATCGTGC AGTGCA 66

292 (i) SEQUENCE CHARACTERISTICS:
293 (A) LENGTH: 64 base pairs
294 (B) TYPE: Nucleic Acid
295 (C) STRANDEDNESS: Single
296 (D) TOPOLOGY: Linear

290 (2) INFORMATION FOR SEQ ID NO: 17:

296 (D) TOPOLOGY: Linear

298 (XI) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
301 GATCTGCACT GCACGATSNN CAGGNNTGTS NNGACGNNCT.

30.1 GATCTGCACT GCACGATSNN CAGSNNTGTS NNGACSNNGT CCATGTCCTT 50
303 CCTGAAGCAG TAGA 64
305 (2) INFORMATION FOR SEQ ID NO: 18:
307 (i) SEQUENCE CHARACTERISTICS:

PATENT APPLICATION: US/09/717,641 TIME: 15:13:14 Input Set : A:\P0645P4D2C3.txt Output Set: N:\CRF3\12062000\1717641.raw (A) LENGTH: 25 base pairs 308 309 (B) TYPE: Nucleic Acid 310 (C) SIRANDEDNESS: Single 3.11 (D) TOPOLOGY: Linear 313 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18: 3.16 GCCITTGACA GGTACCAGGA GTTIG 25 (2) INFORMATION FOR SEQ 1D NO: 19: 318 (i) SEQUENCE CHARACTERISTICS: 321 (A) LENGTH: 33 base pairs 322 (B) TYPE: Nucleic Acid 323 (C) STRANDEDNESS: Single 324 (D) TOPOLOGY: Linear 326 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19: 329 CCAACIATAC CACTCTCGAG GTCTAITCGA TAA 33 331 (2) INFORMATION FOR SEO ID NO: 20: 333 (i) SEQUENCE CHARACTERISTICS: 334 (A) LENGTH: 66 base pairs 335 (B) TYPE: Nucleic Acid 336 (C) STRANDEDNESS: Single 337 (D) TOPOLOGY: Linear 339 (xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 20: TCGAGGCICN NSGACAACGC GNNSCIGCGT GCTNNSCGTC TTNNSCAGCT 50 342 344 GGCCTTTGAC ACGTAC 66 346 (2) INFORMATION FOR SEO ID NO: 21: 348 (i) SEQUENCE CHARACTERISTICS: 349 (A) LENGTH: 58 base pairs 350 (B) TYPE: Nucleic Acid 351 (C) STRANDEDNESS: Single 352 (D) TOPOLOGY: Linear (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21: 357 GTGTCAAAGG CCAGCTGSNN AAGACGSNNA GCACGCAGSN NCGCGTTGTC 50 359 SNNGAGCC 58 361 (2) INFORMATION FOR SEQ ID NO: 22: 363 (i) SEQUENCE CHARACTERISTICS: 364 (A) LENCTH: 65 base pairs 365 (B) TYPE: Nucleic Acid 366 (C) STRANDEDNESS: Single 367 (D) TOPOLOGY: Linear 369 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22: 372 GITACTCTAC IGCTICNNSA AGGACATGNN SAAGGICAGC NNSTACCIGC 50 GCNNSGTGCA GTGCA 65 376 (2) INFORMATION FOR SEQ ID NO: 23: 378 (i) SEQUENCE CHARACTERISTICS: 379 (A) LENGTH: 64 base pairs

(B) TYPE: Nucleic Acid

(D) TOPOLOGY: Linear

(C) STRANDEDNESS: Single

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

GATCTGCACT GCACSNNGCG CAGGTASNNG CTGACCTTSN NCATGTCCTT 50

RAW SEQUENCE LISTING

DAIE: 12/06/2000

380

381

382

384

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/717,641

DAIE: 12/06/2000 FIME: 15:13:15

Input Set : A:\P0645P4D2C3.txt
Output Set: N:\CRF3\12062000\1717641.raw

L:3 M:244 W: Invalid beginning of sequence listing, Data=[SEQUENCE LISTING], Duplicate Sequence Listing Title!
L:35 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:36 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]